

Service Manual

Stereo Sound System

DCX49 (GENERAL)



Specifications

Tuner section

Frequency range . . FM: 87.5 - 108 MHz

MW: 531 - 1602 kHz (9 kHz steps)

530 - 1700 kHz

(10 kHz steps)

Cassette deck section

Recording system . AC blas, 4-track stereo

Rewind and fast

Approx. 115 sec. forward time. . .

(C-60)

Wow and flutter . . 0.2% (WRMS)

General

Output power. . . . 200 W (Total P.M.P.O.)

Inputs CD: 47 k ohms (250 mV)

Outputs..... SPEAKERS: 8 ohms

Power

requirements . . . AC: 110 - 127/

200 - 220/ 230 - 250 V

50 Hz/60 Hz

Dimensions

 $(W \times D \times H)$ Approx. 360 x 370

307 mm

HEADPHONE: 8 ohms

RB 49 REMOTE CONTROLLER

PRODUCT CODE No.

Power

requirements . . . DC: 3V, "AA/SUM-3/ R6" battery x 2

Dimensions

129 318 03

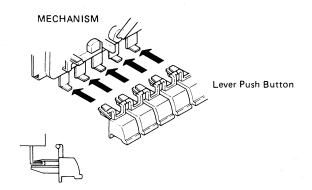
 $(W \times D \times H) \dots Approx. 160 \times 40$

x 18 mm

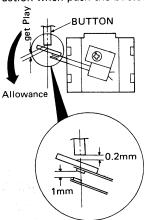
Specifications subject to change without notice.

HOW TO ASSEMBLE THE SET-

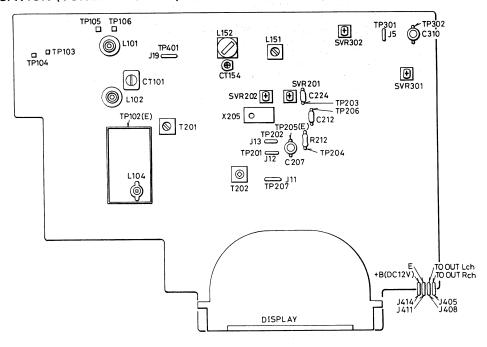
Mechanism



CHECK NOTICE: Please install a Leaf SW as this follow. Because to have space untill switch action when push the button.



PARTS LOCATION (TUNER SECTION)



ADJUSTMENTS-

- NOTE: 1. Power source voltage is DC 12V.
 - 2. Use a screw driver with plastic grip for all adjust-
 - 3. Signal input must be kept as low as possible to avoid overload.
- 4. Use an output meter of the highest possible sensitivity.
- 5. Adjust the intermediate frequency of AM and FM to the frequency of ceramic filter.

ADJUSTMENTS -

(1) FM Band

Antenna: 75 ohm open SG direct, standard modulation frequency: 1kHz, Deviation: 75 kHz (Mono)

ITEMS		FREQUENCY	INPUT COND	ITIONS	ITIONS OUTPUT CON		ADJUST-	STANDARDS
		INDICATED POSITION	MEASURING INSTRUMENTS	CONNEC- TIONS	MEASURING CONNEC- INSTRUMENTS TIONS		ING PARTS	
	V-curve	00.0 4411-		TP103 (H)	FM sweep	TP203 (H) TP205 (E)	T201	Max.
IF	S-curve	98.0 MHz		TP104 (E)	generator	TP204 (H) TP205 (E)	T202	Symmetrical Wave Max.
Tuning	Low	87.5 MHz			Digital	TP401 (H)		
Coverage	High	108.0 MHz	08.0 MHz	_	Voltmeter	TP102 (E)	L104	8.0 ± 0.05V
Tracking	Low	90.0 MHz	EM CC / INADA	TP103 (H)	VTVM	Tuner out (L or R)	L101 L102	Max.
	High	106.0 MHz		TP104 (E)	Oscilloscope		CT101	
IF S-curve (Distortio		98.0 MHz	FM-SG (66dB)	TP103 (H) TP104 (E)	Digital Voltmeter	TP201 (H) TP202 (E)	T202	0±0.05V
S.D. (Station D	etector)	98.0 MHz	FM-SG (22dB)	TP103 (H) TP104 (E)	Digital Voltmeter	TP207 (H) TP205 (E)	SVR201	Less than 4V
VCO (19	kHz)	98.0 MHz	FM-SG (66 dB)	_	Counter	TP301 (H) TP302 (E)	SVR302	19kHz±50Hz
Separation	1	98.0 MHz	FM-SG (66dB) Stereo Modula- tor*	TP103 (H) TP104 (E)	VTVM Oscilloscope	Tuner out (L or R)	SVR301	L/R-ratio Max.

^{*} Stereo modulator: Deviation

 $Main \; (L+R) \;\; \dots \; \pm 40 \; kHz$ Pilot (19kHz) ... 6.75 kHz

(2) MW Band

MW step switch to select "10K" position. (GENERAL only) Antenna: IRE Loop antenna, Standard modulation: 1 kHz 30%

		FREQUENCY	INPUT CONE	DITIONS	OUTPUT CONDITIONS		ADJUST-	1	
ITE	MS	INDICATED POSITION	MEASURING INSTRUMENTS	CONNEC- TIONS	MEASURING INSTRUMENTS	CONNEC- TIONS	ING PARTS	STANDARDS	
16	:	1000 kHz	AM Sweep generator (450 kHz non modulation)	TP105 (H) TP106 (E)	AM sweep generator	TP206 (H) TP205 (E)	(X205)	NOT ADJUST ONLY CHECK	
Tuning	Low	530 kHz			Digital	TP401 (H)		1.2 ~ 1.3 V	
Coverage	High	1700 kHz	1 —		Voltmeter	TP102 (E)	L151	8.0 ± 0.05V	
Tracking	Low	600 kHz	AM CC /7E dD)		VTVM	Tuner out	L152		
Tracking	High	1400 kHz	AM-SG (75 dB)	Loop ANT.	Oscilloscope	(L or R)	CT151	Max.	
S.D. (Station D	etector)	1000 kHz	AM-SG (85 dB)	Loop ANT.	Digital Voltmeter	TP207 (H) TP205 (E)	SVR202	Less than 4V	

ADJUSTMENT OF DECK & TORQUE-

Amplifier Adjustment

	Item	Deck	Test Tape	Input	DOLBY SW.	Output	ADJUST POINT	Remarks
1	Head Azimuth	TAPE A TAPE B	VTT738	-	OFF	TAPE OUT	AZIMUTH SCREW	Adjustment to obtain maximum, right and left balanced output.
2	Playback	TAPE A	TCC-130	_	OFF	TAPE	SVR502 SVR602	Adjust to obtain 540mV on
_	Level TAPE B	TAPE B	200nW/m	_	OFF	OUT	SVR501 SVR601	VTVM.
3	Rec/Play Level	₹APE B	AC-224	1kHz 8 dB	OFF	TAPE OUT	SVR503 SVR603	Adjust to obtain 56mV on VTVM.
4	Rec/Play Frequency	TAPE B	AC-224	1kHz/10kHz -2.8 dB	ON	TAPE OUT	SVR504 SVR604	Adjust to obtain same output of 1kHz and 10kHz.

Note: Input: CD IN terminal

ADJUSTMENT OF DECK & TORQUE -

Tape Speed Adjustments

Step	Speed	Deck	Test Tape	SVR	Tape Counter
1	Normal	TAPE A	MTT-111 (3000Hz)	SVR001	3000 +5Hz
2	High	TAPE A	TCW-211 (1500Hz)		3000 +-10%

- 1. Set the test tape (MTT-111) to "TAPE A" deck.
- 2. Adjustment to obtain the tape speed counter at Play of step 1.
- 3. High spped adjustment should be made after normal speed adjustment.
- 4. Set the TAPE B mechanism is record made with C-60 Blank cassette tape.
- 5. Adjustment should be made at the ending portion of the tape.
- 6. Set the Dubbing speed "HIGH".
- 7. Set the test tape (TCW-211) to "TAPE A" deck.
- 8. Confirm the indication of the tape speed counter within 2 second after push the PLAY(TAPE A) and REC.(TAPE B) button.

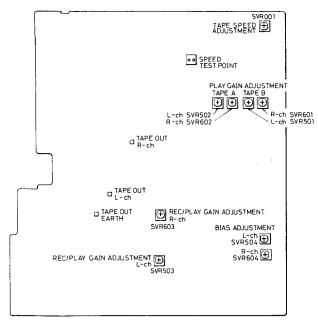
Torque Measurements

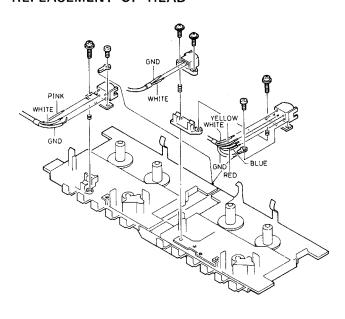
Note: Prior to measurement, clean the head, capstan and pinch roller.

Item	Take-up torque	Back tension	Pulley tension
Test cassette	PLAY: TW-2111 F.FWD/REW: TW-2231	PLAY/F.F: TW-2111 REW: Torque Gauge	Driving power cassette: TW-2412
PLAY	30 ~ 60 gr. cm	2 ~ 4.5 gr. cm	
F. FWD	55 ~ 120 gr. cm	.	>60g
REW	55 ~ 120 gr. cm		

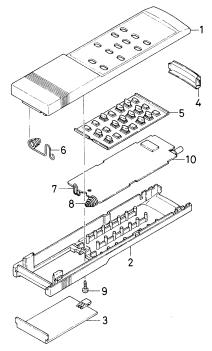
PARTS LOCATION (DECK AMP SECTION)-

REPLACEMENT OF HEAD



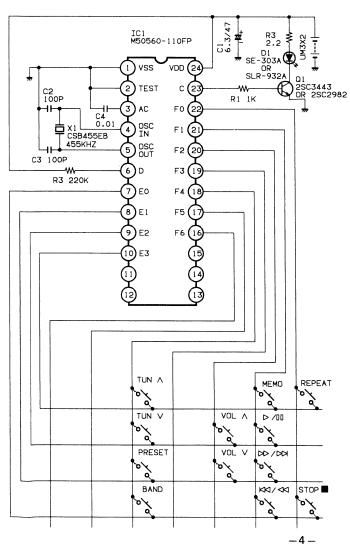


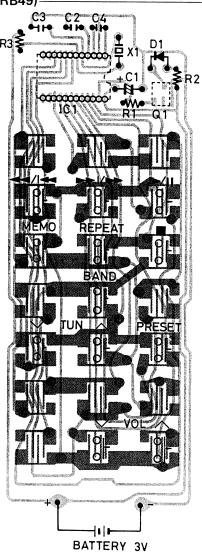
EXPLODED VIEW & PARTS LIST (REMOTE CONTROLLER... RB49)

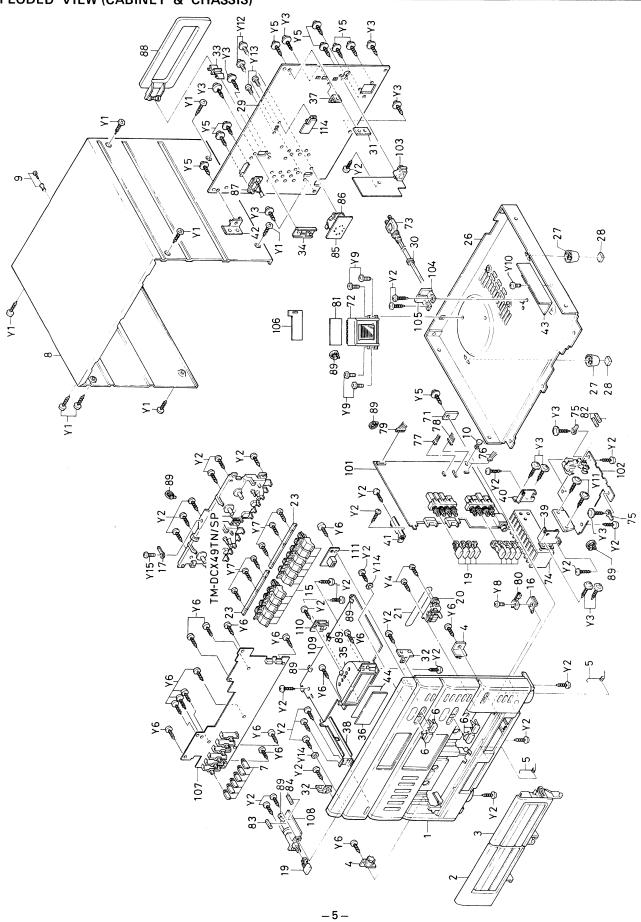


Ref. No.	Part No.	Description
1	614 213 0049	TOP LID ASSY
2	614 203 2602	BOTTOM LID
	614 203 2619	BATTERY LID
4 5 6	614 203 2626	SIGN WINDOW
5	614 213 0100	PUSH BUTTON
6	614 203 2664	TERMINAL
7	614 203 2671	SPRING COIL
8	614 203 2688	SPRING COIL
9	411 100 0102	SCR S-TPG BIN 2X6
10	614 213 0223	P.C BOARD ASSY
X1	614 199 8435	CERAMIC RESONATOR KBR455BTL
IC1	409 121 0201	IC M50560-110FP
Q1	406 006 7300	TR 28C 3443BF
or	406 006 7409	TR 2SC3443BG
or	406 006 7508	TR 2SC2982B
or	406 006 7607	TR 2SC2982C
D1	408 004 0604	LED SE303A
or	408 004 0703	LED SLR-932A
C1	403 107 4306	ELECT 47U M 63V
C2	403 009 5817	CAPACITOR 100PK 50V
C3	403 009 5817	CAPACITOR 100P K 50V
C4	403 010 3007	CAPACITOR 0.01U 50V
R1	401 037 5400	MT-GLAZE 100 JA 1/10 W
R2	401 150 5400	MTGLAZE 2.2 ZA 1/8W
R3	401 038 0909	MTGLAZE 220K JA 1/10W

SCHEMATIC & WIRING DIAGRAM (REMOTE CONTROLLER... RB49)







PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol $ildе{\Lambda}$ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with $ildе{\Lambda}$, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.

Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CAUTION: Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.

PACKING & ACCESSORIES

Ref. No.	Part No.	Description
	614 213 9592	INNER CARTON
	614 208 7855	PAD, TOP
	614 207 8198	PAD, BOTTOM
	614 176 3569	INNER POLYE COVER, SET
	614 213 9677	INSTRUCTION MANUAL
1	614 036 6358	SOCKET, 3P, FOR CD
1	614 016 4541	PLUG ASSY

CABINET (& CHASSIS		
Ref. No.	Part N	lo.	Description
1	614 214	0628	ASSY, PANEL, FRONT
2	614 211	3769	ASSY, LID, CASSETTE, TAPE A
3	614 211	3783	ASSY, LID, CASSETTE, TAPE B
4	614 069	0385	GEAR ASSY
5	614 151	7254	SPRING COIL, LID OPEN
6	614 207	3001	BUTTON
7	614 207	2349	KNOB, SLIDE, GEQ
8	614 207	2899	CABINET
9	614 129	4865	FIXER
10	614 129	4667	FIXER, DECK PCB BUSH
15	614 207	2370	BUTTON, MECHANISM
16	614 120	9050	BRACKET SWITCH, LEAF
17	614 051	9785	LUG, MECHANISM GND.
19	614 207	2356	BUTTON, POWER/FUNCTION ETC
20	614 207	7986	COUNTER
21	614 207	2509	BELT, SQUARE, COUNTER
23	614 194	9239	BRACKET, MECHANISM BUTTON
26	614 215		CABINET, BOTTOM
27		2387	FOOT
28	614 106	4215	STAND
29	614 213	6362	PANEL, REAR
30	614 129	1710	FIXER
31	614 207	2455	SUPPORT, REAR SIDE DECK
32	614 207	2394	BRACKET-E, CABINET
33	614 108		BRACKET, ANT
34	614 113		BRACKET, ANT
35	614 117	9988	REFLECTOR, LCD
36		9790	SIGN WINDOW, LCD
37	614 207		BRACKET-E, OUTPUT PCB
38	614 207		BRACKET-E, TUNER PCB
39	614 207		BRACKET-E, HEAT SINK LEFT
40	614 207	3506	BRACKET-E, HEAT SINK RIGHT
41	614 207		BRACKET-E, DECK PCB
42		7657	SUPPORT, REAR SIDE DECK
43	614 212		SHIELD
44		1535	SHEET
45	614 125	6566	CUSHION 10X30X6T

FIXING PARTS

Ref. No.	Part No.	Description
Y1	411 021 6603	SCR S-TPG BIN 3X8
Y2	411 021 6405	SCR S-TPG BIN 3X8
Y3	411 020 9902	SCR S-TPG BRZ + FLG 3X8
Y4	411 021 1806	SCR S-TPG BIN 2.6X10

Ref. No.	Part No.	Description
Y5	411 020 8905	SCR S-TPG BRZ + FLG 3X10
Y6	411 021 3503	SCR S-TPG BIN 3X10
Y7	411 021 3107	SCR S-TPG BIN 2.6X8
Y8	411 002 8503	SCR PAN 3X6
Y9	411 001 4209	SCR S-TPG BIN 4X8
Y10	411 021 5705	SCR S-TPG BIN 3X6
Y11	411 021 4500	SCR S-TPG BIN 3X16
Y12	411 049 0003	SCR PAN + FLG 3X8
Y13	411 039 4103	SCR PAN 2X8
Y14	411 092 3303	WASHER Z 3X12X1
1		

ELECTRICAL PARTS

Ref. No.	Part No.	Description
71	∆ 614 214 2561	PCB
72	₾ 614 214 3476	POWER TRANS
73	1 ∆ 614 023 3469	POWER CORD
74	614 209 4259	HEAT SINK
75	614 051 9785	LUG
76	614 209 3481	SOCKET, ERASE HEAD
77	614 209 3498	SOCKET, PLAY HEAD
78	614 209 3504	SOCKET, REC/PLAY HEAD
79	614 209 3511	SOCKET, MECHA
80	614 018 9315	SWITCH, STOP
81	₾ 614 214 2295	PCB, PT PRIMARY
82	₾ 423 005 3508	FUSE 250V 1.6A (F701,F801)
or	423 017 0106	FUSE 250V 1.6A
83	423 004 1406	FUSE 250V T800MA
or	423 004 1307	FUSE 250V 800MA
or	423 016 9902	FUSE 250V 0.8A (F901)
84	423 003 2404	FUSE 250V T400MA (F902)
or	423 016 9605	FUSE 250V 0.4A
85	1 1 1 1 1 1 1 1 1 1	PCB
86	1 ∆ 614 018 2071	SWITCH, VOLTAGE SELECT
87	614 202 1903	TERMINAL BOARD, FM EXT. ANT.
88	614 036 9007	LOOP ANT ASSY
89	614 129 2496	FIXER
or	614 129 4971	FIXER

DECK P.C.BOARD ASSY

Ref. No.	Part No.	Description
101	614 214 2042 614 017 6964 614 211 3592 1 614 130 6919 614 211 3233 614 020 6579 614 020 6562 614 020 1246 614 211 3240 614 035 1712 614 208 2331 614 209 2408	ASSY, PCB, DECK AMP TERMINAL BOARD HEAT SINK TUBE 20X1D, FOR R931 SOCKET, 5P, + B SOCKET, 5P SOCKET, 4P SOCKET, 5P SOCKET, 5P, SP SOCKET, HEADPHONE SOCKET, FRONT-DECK SWITCH, PUSH, FUNCTION
L501 L502	614 209 2415 614 029 3807 614 027 8545	SWITCH, PUSH, TAPE SELECT MX COIL CHOKE

ILDID	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
LEST	L502		INDUCTOR, FERITE	Q507		TR 2SC3330-U
LEO1	L511	614 210 3722	INDUCTOR, FERITE	or	405 019 3705	TR 2SC536-G-AUD-SPA
LEON_						
STATE				Q508	I .	TR 2SC1740S-S
LE11	1		1			1
LEIZ	1			1		1
1031			*			
SVRE01 614 204 1901 SEM VR, 10K or 405 017 2092 TR SC01816-GR SVRE02 614 204 1901 SEM VR, 10K or 405 017 979 TR SC03330-U SVRE02 614 204 1901 SEM VR, 10K or 405 017 979 TR SC0336-G-AUD-SPA SVRE01 614 204 1901 SEM VR, 10K or 405 017 979 TR SC0336-G-AUD-SPA SVRE02 614 204 1901 SEM VR, 10K or 405 017 979 TR SC0336-G-AUD-SPA SVRE03 614 204 1901 SEM VR, 10K or 405 017 979 TR SC03330-U SVRE03 614 204 1901 SEM VR, 10K or 405 017 979 TR SC03330-U SVRE04 614 204 1901 SEM VR, 10K or 405 017 979 TR SC03330-U SVRE04 614 017 2095 PLUG, 3P CV 405 017 970 TR SC0330-U SVRE04 614 017 2095 PLUG, 3P CV 405 017 970 TR SC0330-U SVRE04 614 017 2095 PLUG, 3P CV 405 017 970 TR SC0330-U SVRE04 614 017 2095 PLUG, 3P CV 405 017 970 TR SC0330-U SVRE04 614 017 2164 PLUG, 9P or 405 017 970 TR SC0330-U SVRE04 614 017 2164 PLUG, 9P or 405 017 970 TR SC0330-U SVRE04 614 017 2164 PLUG, 9P or 405 017 970 TR SC0330-U SVRE04 CV 409 020 9107 IC LCAGGGUEP QG03 405 011 8609 TR SC01740S-S CV 405 019 3705 TR SC0338-G-AUD-SPA CV	1					
SVRB02 614 204 1901 SEM VR, 10K or 405 017 9709 TR 25C3330-U SVRB02 SVRB03 614 204 1901 SEM VR, 10K or 405 019 3705 TR 25C3566-G-AUD-SPA SVRB04 614 204 1901 SEM VR, 10K or 405 019 3705 TR 25C356-G-AUD-SPA SVRB04 614 204 1901 SEM VR, 10K or 405 019 3705 TR 25C356-G-AUD-SPA SVRB04 614 204 1901 SEM VR, 10K or 405 019 3705 TR 25C358-G-AUD-SPA SVRB04 614 204 1901 SEM VR, 10K or 405 019 3705 TR 25C358-G-AUD-SPA SVRB04 614 204 1901 SEM VR, 10K or 405 019 3705 TR 25C358-G-AUD-SPA SVRB04 614 204 1901 SEM VR, 10K or 405 019 3705 TR 25C358-G-AUD-SPA SVRB04 614 204 1901 SEM VR, 10K or 405 019 3705 TR 25C358-G-AUD-SPA SVRB04 614 204 1901 SEM VR, 10K or 405 019 3705 TR 25C358-G-AUD-SPA SVRB04 614 204 1901 SEM VR, 10K or 405 019 3705 TR 25C358-G-AUD-SPA SVRB04 614 204 1901 SEM VR, 10K or 405 017 9709 TR 25C3330-U SVRB04 614 204 1901 SEM VR, 10K or 405 017 9709 TR 25C3330-U SVRB04 614 204 1901 SEM VR, 10K or 405 017 9709 TR 25C3330-U SVRB04 614 204 1901 SEM VR, 10K Or 405 017 9709 TR 25C3330-U SVRB04 614 204 1901 SEM VR, 10K SVRB04 614 204 1901 SVRB04 614				-		
Symbox 614 204 1901 SEMI VR, 10K or 405 019 3705 TR 250536-G-AUD-SPA	1			1		_
SVRB03	1			1		
SyrRe01 614 204 1916 SEMI VR, 100K OF 405 011 8609 TR 25C1340-S-S	•					
SyrRe02 614 204 1901 SEMI VR, 10K or	1			I	1	l.
SyrRe03	1			1 -		
SYREGO	:			or		l .
SyreGod 614 204 1956 SEMIVR, 100K Or			1	or		
CN2	SVR604			or		
CN3	CN1	614 017 2096	PLUG, 2P	Q602	405 011 8609	TR 2SC1740S-S
CNS	CN2	614 017 2102	PLUG, 3P	or	405 012 2002	TR 2SC1815-GR
CNS			L '	or		TR 2SC3330-U
CL	1		i i	or		
or	1		1 '			
December 100 101 102 103	1 I			Q603		
ICSD01			1		1	
ICS20	1 1		1			
ICS21	1 1	l .		1 '		
CG51	1		1			
Q1				1 -		
Or			1	I		
Q2	1 '					
Or			1 1	1		
Q3	_					
or 405 012 2002 TR 2SC3330-U or 405 017 9709 TR 2SC3330-U or 405 019 3705 TR 2SC3350-U or 405 02 7204 TR 2SC945A-K Or 405 012 2002 TR 2SC1740S-S or 405 012 2002 TR 2SC1740S-S or 405 011 8609 TR 2SC3330-U Or 405 017 79709 TR 2SC3330-U Or 405 017 79709 TR 2SC3330-U Or 405 012 2002 TR 2SC3330-U TR 2SC1740S-S Or 405 012 2002 TR 2SC3330-U TR 2SC3330-U TR 2SC3330-U TR 2SC3330-U <				1 7	1	
or 405 017 9709 TR 2SC533G-C-AUD-SPA or 405 019 3705 TR 2SC53G-C-AUD-SPA or 405 020 7204 TR 2SC945A-K Q606 405 011 8609 TR 2SC1740S-S or 405 017 701 TR 2SC945A-K or 405 012 7204 TR 2SC1815-GR or 405 011 8609 TR 2SC1815-GR or 405 012 7202 TR 2SC1815-GR or 405 017 9709 TR 2SC3330-U 0 0 405 019 3705 TR 2SC536-G-AUD-SPA or 405 019 3705 TR 2SC536-G-AUD-SPA or 405 019 3705 TR 2SC536-G-AUD-SPA or 405 017 3705 TR 2SC136G-G-AUD-SPA or 405 017 707 TR 2SC136G-G-AUD-SPA					I .	l l
or 405 019 3705 TR 2SC6945A-K Q606 405 012 7204 TR 2SC945A-K Q606 405 012 2002 TR 2SC1740S-S TR 2SC1740S-S Or 405 012 2002 TR 2SC1740S-S Or 405 012 2002 TR 2SC1330-U TR 2SC3330-U Or 405 012 2002 TR 2SC3330-U Or 405 017 9709 TR 2SC3330-U Or 405 017 9709 TR 2SC3330-U Or 405 012 2002 TR 2SC3330-U Or 405 012 7007 TR 2SC3330-U TR 2SC1740S-S Or 405 012 7007 TR 2SC3330-U TR 2SC1740S-S	1					I .
Q4	1	1		or		
or 405 004 4601 TR ZSA6608-F-SPA or 405 017 9709 TR ZSC3330-U or 405 012 2002 TR 2SC1315-GR or 405 019 3705 TR 2SC336-G-AUD-SPA or 405 017 9709 TR 2SC3330-U Q607 405 011 8609 TR 2SC345A-K or 405 020 7204 TR 2SC945A-K or 405 017 9709 TR 2SC3330-U TR 2SC345A-K or 405 017 9709 TR 2SC3330-U TR 2SC345A-K or 405 019 3705 TR 2SC3330-U TR 2SC3330-U TR 2SC3330-U TR 2SC3330-U TR 2SC345A-K or 405 019 3705 TR 2SC3330-U TR 2SC3330-U TR 2SC3330-U TR 2SC3330-U TR 2SC345A-K or 405	t l	405 020 7204	TR 2SC945A-K	Q606		
Q501	Q4	405 001 7001	TR 2SA1015-GR	or		
Or	or	405 004 4601	TR 2SA608-F-SPA	or	405 017 9709	TR 2SC3330-U
or 405 017 9709 070 070 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 012 3705 070 405 019 3705 070 405 019 3705 070 405 019 3705 070 405 019 3705 070 405 019 3705 070 405 019 3705 070 405 019 3705 070 405 019 3705 070 405 019 3705 070 405 019 3705 070 405 019 3705 070 070 405 019 3705 070 40	Q501	405 011 8609	TR 2SC1740S-S	or		TR 2SC536-G-AUD-SPA
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or 405 020 7204 TR 28C945A-K or 405 011 8609 TR 28C1740S-S or 405 019 3705 TR 28C3330-U or 405 019 3705 TR 28C536-G-AUD-SPA or 405 012 2002 TR 28C536-G-AUD-SPA or 405 011 8609 TR 28C3330-U OR 405 012 2002 TR 28C536-G-AUD-SPA or 405 011 8609 TR 28C1740S-S or 405 017 9709 TR 28C3330-U OR 405 019 3705 TR 28C536-G-AUD-SPA or 405 017 9709 TR 28C3330-U OR 405 017 9709 TR 28C3330-U OR 405 017 9709 TR 28C3330-U OR 405 019 3705 TR 28C3330-U OR 405 019 3705 TR 28C3330-U OR 405			1	Q607		
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	"	703 012 2002	11. 2301013 GR	Q931	405 020 7204	TR 25C945A-K

Ref. No.	Part No.	Description
Q932	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q933	405 012 2002	TR 2SC1815-GR
or	405 018 0200	TR 2SC3331-U
or	405 020 7204	TR 2SC945A-K
D1	407 007 9904	DIODE GMA01
D2	407 007 9904	DIODE GMA01
D3	407 007 9904	DIODE GMA01
D4	407 007 9904	DIODE GMA01
D5	407 007 9904	DIODE GMA01
D6	407 005 4505	DIODE DS442X
D7	407 005 4505	DIODE DS442X
D8	407 005 4505	DIODE DS442X
D9	407 005 4505	DIODE DS442X
D10	407 007 9904	DIODE GMA01
D11	407 007 9904	DIODE GMA01
D12	407 007 9904	DIODE GMA01
D13	407 007 9904	DIODE GMA01
D14	407 007 9904	DIODE GMA01
D15	407 007 9904	DIODE GMA01
D16	407 007 9904	DIODE GMA01
D501	407 007 9904	DIODE GMA01
D502	407 007 9904	DIODE GMA01
D601	407 007 9904	DIODE GMA01
D602	407 007 9904	DIODE GMA01
C935	403 081 1209	POLYPRO 0.018U J 100V
R757	△ 401 018 2503	CARBON 330 JB 1/4W
		FLAME PROOF
R857	△ 401 018 2503	CARBON 330 JB 1/4W
		FLAME PROOF
R931	1 ∆ 401 023 0709	CARBON 82 JA 1/4W

MAIN P.C.BOARD ASSY

Ref. No.	Part No.	Description
102	614 214 20	59 ASSY, PCB, MAIN
	614 208 45	57 TERMINAL
	614 208 45	40 FUSE HOLDER
or	614 123 00	23 BRACKET FUSE
	614 017 21	26 PLUG, 5P, SP, + B
	614 017 21	102 PLUG, 3P, AMP IN
		SSS SOCKET, 3P
	614 020 12	246 SOCKET, 5P
IC953		302 IC STK4112MK2
0951		509 TR 2SC1740S-S
or	405 012 20	002 TR 2SC1815-GR
or	405 017 9	709 TR 2SC3330-U
or		705 TR 2SC536-G-AUD-SPA
or .	405 020 7	204 TR 2SC945A-K
D953	▲ 407 004 9	105 DIODE DSF10C
D954	★ 407 004 9	105 DIODE DSF10C
D955	₾ 407 004 9	105 DIODE DSF10C
D956	₫ 407 004 9	105 DIODE DSF10C
D957	407 004 9	105 DIODE DSF10C
D958	407 004 9	105 DIODE DSF10C
D959	407 004 9	105 DIODE DSF10C
D960	407 004 9	105 DIODE DSF10C
D961	407 007 9	904 DIODE GMA01
D962	407 007 9	904 DIODE GMA01
C756	403 062 1	105 POLYESTER 0.047U M 50V
C856	403 062 1	105 POLYESTER 0.047U M 50V
R755	△ 401 008 7	204 CARBON 2.2K JB 1/2W
		FLAME PROOF
R756	1 1 401 010 5	601 CARBON 5.6 JB 1/2W
		FLAME PROOF
R855	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	204 CARBON 2.2K JB 1/2W
		FLAME PROOF

Ref. No.	Part No.	Description
R856	△ 401 010 5601	CARBON 5.6 JB 1/2W FLAME PROOF
R960 R963	⚠ 402 023 1703 ⚠ 402 023 1703	FUSIBLE RES 100 J- 1/4W FUSIBLE RES 100 J- 1/4W

INPUT P.C.BOARD ASSY

Ref. No.	Part No.	Description
103	614 214 2066 614 016 8228 614 016 8341 614 035 2702 614 020 6562 614 019 8553 614 020 1253	ASSY, PCB, INPUT PLUG, 3P, CD PLUG, 2P, TP SOCKET, CD RCA SOCKET, 4P SOCKET, PHONO SOCKET, 6P

REGULATOR 1 P.C.BOARD ASSY

Ref. No.	Part No.	Description
104	614 214 2073	ASSY, PCB, REGULATOR 1
	614 020 6555	SOCKET, 3P
IC951	1 ∆ 409 078 2402	IC L7812ML
or	∆ 409 122 6202	IC NJM7812FA
or	▲ 409 168 2107	IC UPC7812HF
or	▲ 409 001 7603	IC AN7812F

REGULATOR 2 P.C.BOARD ASSY

Ref. No.	Part No.	Description
105	614 214 2080	ASSY, PCB, REGULATOR 2
	614 020 6555	SOCKET, 3P
IC952	∆ 409 078 2402	IC L7812ML
or	1 ∆ 409 122 6202	IC NJM7812FA
or	▲ 409 168 2107	IC UPC7812HF
or	▲ 409 001 7603	IC AN7812F

PT. SECOND P.C.BOARD ASSY

Ref. No.	Part No.	Description
106	614 214 2097	ASSY, PCB, PT. SECOND
	614 020 1246	SOCKET, 5P
C950	403 057 3800	POLYESTER 0.1U M 50V
C951	403 057 3800	POLYESTER 0.1U M 50V
C952	403 057 3800	POLYESTER 0.1U M 50V
R950	▲ 402 039 3609	RESISTOR 0.47 J- 1/2W

GRAPHIC EQUALIZER VOLUME P.C.BOARD ASSY

Ref. No.	Part No.	Description
107	614 214 1816 614 208 2249	ASSY, PCB, GEQ. VR PLUG, FRONT-DECK
	614 211 2991	SOCKET, 2P, TO AMP IN
	614 020 1222	SOCKET, 3P
	614 003 4363	V.R, GEQ
	614 003 5766	V.R, BALANCE
	614 024 2393	SWITCH, VR UP/DOWN
L951	614 028 3907	FILTER
L952	614 028 3907	FILTER
\$401	614 024 2393	SWITCH, DOWN
S402	614 024 2393	SWITCH, UP
S403	614 024 2393	SWITCH, BAND
S404	614 024 2393	SWITCH, A/M
S405	614 024 2393	SWITCH, CH 1
S406	614 024 2393	SWITCH, CH 2

Ref. No.	Part No.	Description
S407	614 024 2393	SWITCH, CH 3
S408	614 024 2393	SWITCH, CH 4
\$409	614 024 2393	SWITCH, CH 5
S410	614 024 2393	SWITCH, CH 6
IC954	409 053 0409	IC TC9153AP
Q703	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q704	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
Q803	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 019 3705	TR 2SC536-G-AUD-SPA
or	405 020 7204	TR 2SC945A-K
Q804	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
Q950	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
Q955	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
Q956	405 012 2002	TR 2SC1815-GR
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
D963	407 007 9904	DIODE GMA01
D964	407 007 9904	DIODE GMA01
D965	408 008 9108	LED SLR-56VC70F130-N
D966	408 008 9108	LED SLR-56VC70F130-N
D967	408 008 9108	LED SLR-56VC70F130-N
D968	408 008 9108	LED SLR-56VC70F130-N
D969	408 008 9108	LED SLR-56VC70F130-N

POWER SWITCH P.C.BOARD ASSY

Ref. No.	Part No.	Description
108	614 214 1823 <u>A</u> 614 017 6964 <u>A</u> 614 208 4540	ASSY, PCB, POWER SW TERMINAL BOARD FUSE HOLDER
or	⚠ 614 208 4540 ⚠ 614 123 0023 ⚠ 614 018 8967	BRACKET FUSE SWITCH, POWER
C999	₾ 404 000 2000	CERAMIC 0.01U Z 250V

TUNER P.C.BOARD ASSY

Ref. No.	Part No.	Description
109	614 214 0567	ASSY, PCB, TUNER
	614 116 5349	SHIELD PLATE, PARTS SIDE
	614 117 1029	SHIELD PLATE, PATTERN SIDE
	614 030 4787	CERAMIC FILTER (X204))
	614 208 9644	FILTER (X205)
or	614 210 4668	FILTER
	614 207 9348	LCD
CT101	614 007 3683	TRIMMER, 8P
CT151	614 007 6356	TRIMMER, 11P
T201	614 030 3476	I.F.T, FM
T202	614 030 4114	I.F.T, FM
L101	614 034 9870	VHF COIL
L102	614 034 9887	VHF COIL
L103	614 028 4058	FILTER
L104	614 035 0036	VHF COIL
L151	614 033 8904	O.S.C COIL, MW
L152	614 032 7878	ANT COIL, MW
X201	614 030 5128	I.F FILTER

Ref. No.	Part No.	Description
X202	614 030 5128	I.F FILTER
X401	614 008 0063	CRYSTAL 7.2MHZ
or	614 204 0317	CRYSTAL
SVR201	614 204 1918	SEMI V.R, 20K
SVR202	614 204 1901	SEMI V.R, 10K
SVR301	614 204 1864	SEMI V.R. 1K
SVR302 CN401	614 204 1901 614 020 6548	SEMI V.R, 10K SOCKET
CN401 CN403	614 020 6555	SOCKET, 3P
CN407	614 020 6555	SOCKET, 3P
TP103	614 017 6964	TERMINAL BOARD
TP104	614 017 6964	TERMINAL BOARD
TP105	614 017 6964	TERMINAL BOARD
TP106	614 017 6964 409 016 2204	TERMINAL BOARD IC LA1265S
IC201 IC301	409 016 2204	IC LA3361
IC401	410 064 8407	IC TC9306F-045 BS
IC402	409 154 0209	IC TC9172AP
Q101	405 078 4507	TR 2SK83-R2
Q102	405 012 5904	TR 2SC1923-Y
Q103	405 012 5904	TR 2SC1923-Y
Q104	405 012 5904 405 018 7902	TR 2SC1923-Y TR 2SC380TM-0
Q201 Q202	405 018 7902 405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
Q301	405 012 2002	TR 2SC1815-GR
Q302	405 012 2002	TR 2SC1815-GR
Q303	405 016 2206	TR 2SC2878-A
07 02 04	405 016 2305 405 016 2206	TR 2SC2878-B TR 2SC2878-A
Q304 or	405 016 2305	TR 2SC2878-B
Q351	405 001 7001	TR 2SA1015-GR
Q352	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
Q354	405 011 8609 405 012 2002	TR 2SC1740S-S TR 2SC1815-GR
or or	405 020 7204	TR 2SC945A-K
Q355	405 001 7001	TR 2SA1015-GR
Q356	405 001 7001	TR 2SA1015-GR
Q370	405 001 7001	TR 2SA1015-GR
Q401	405 011 8609 405 012 2002	TR 2SC1740S-S TR 2SC1815-GR
or or	405 020 7204	TR 2SC945A-K
Q402	405 078 4903	TR 2SC2634-R
Q403	405 078 4903	TR 2SC2634-R
Q404	405 011 8609	TR 2SC1740S-S
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K VA SVC211SP-B2-AUD
D101 D102	408 000 0103	VA SVC211SP-B2-AUD
D102	408 000 0103	VA SVC211SP-B2-AUD
D104	407 012 5809	DIODE 1SS176
or	407 012 4406	DIODE 1SS133
D151	407 091 5004	VARACTOR DI SVC321SPA-C-2
D152	407 091 5004	VARACTOR DI SVC321SPA-C-2
D201	407 013 1701	DIODE 181588
or D301	407 013 7109 407 013 1701	DIODE 1S2473 DIODE 1S1588
or	407 013 1701	DIODE 131388
D302	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D351	407 013 1701	DIODE 1S1588
or	407 013 7109	DIODE 1S2473
D352	407 053 8807	ZENER DIODE MTZ9.1B DIODE 1S1588
D401 or	407 013 1701 407 013 7109	DIODE 151588 DIODE 152473
D402	407 013 1701	DIODE 151588
or	407 013 7109	DIODE 1S2473
	407 013 1701	DIODE 1S1588
D403	I .	
D403 or D408	407 013 1701 407 013 7109 407 013 1701	DIODE 181588

PARTS LIST -

Ref. No.	Part No.	Description
D409 or D410 or D411 or D413	407 013 1701 407 013 7109 407 013 1701 407 013 7109 407 013 1701 407 013 7109 407 013 1701 407 013 7109	DIODE 1S1588 DIODE 1S2473 DIODE 1S1588 DIODE 1S2473 DIODE 1S1588 DIODE 1S2473 DIODE 1S1588 DIODE 1S2473
or D414 or C152 C306 C407 C410 or R380	407 013 7101 407 013 1701 407 013 7109 403 082 2007 403 080 5000 403 106 1603 404 034 8405 404 037 4107 A 401 018 1209	DIODE 151588 DIODE 152473 POLYPRO 510P J 100V POLYPRO 1000P J 100V NP-ELECT 1U Q 50V CAPACITOR 0.047F Z 5.5V CAPACITOR 0.047F - 5.5V CARBON 33 JB 1/4W FLAME PROOF

LCD LAMP P.C.BOARD ASSY

Ref. No.	Part No.	Description
110	614 207 4787	ASSY, PCB, LCD LAMP
CN402	614 020 6548	SOCKET, 2P
PL401	614 045 9647	LAMP 12V 100MA

IR P.C.BOARD ASSY

Ref. No.	Part No.	Description
111	614 207 4794	ASSY, PCB, IR
S411	614 203 7928	SPECIAL SWITCH
CN404	614 020 6555	SOCKET, 3P

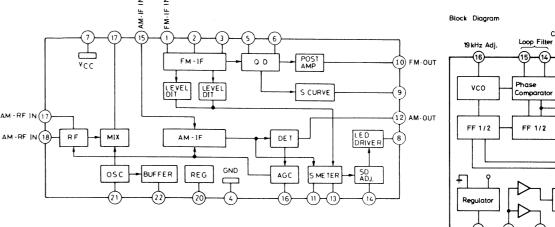
9K/10K STEP SWITCH P.C.BOARD ASSY

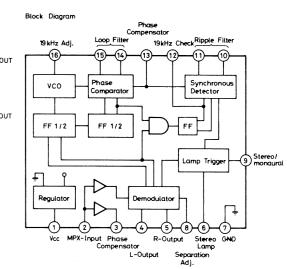
Ref. No.	Part No.	Description
112	614 207 4817	ASSY, PCB, 9K/10K STEP SW
S412	614 011 4591	SLIDE SWITCH
CN408	614 020 6555	SOCKET, 3P

IC BLOCK DIAGRAM (1/3) -

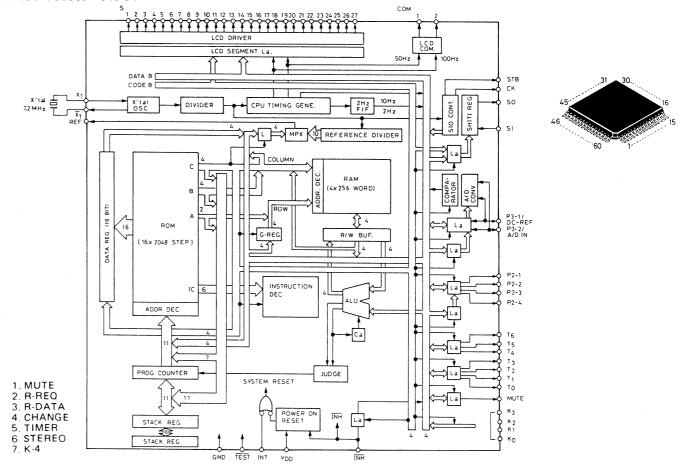
IC201 LA1265 (Tuner System)

IC301 LA3361 (PLL FM MPX. Stereo Demodulator)





IC401 TC9306F-045-BS



IC BLOCK DIAGRAM (2/3)

•			Remarks	46	REF	Reference Frequency signal output	Output terminal of reference frequency signal supplied to PLL USL. It is possible to select one of eight kinds of reference frequency signals (1 kHz, 5 kHz, 9 kHz, 9 kHz, 10 kHz, 12.5 kHz, 25 kHz, 50 kHz and 100 kHz)
LCD common Terminal to output common signal output to LCD output It is possible to indicate max. 54 segments by using the matrix 51-527. At this terminal, three levels of Voo. 1/2 Voo and GND are autourned with intervals of 5 ms at a frequency of 50 Hz.	Terminal to output common signal outfit is possible to indicate max. 54 segment At this terminal, three levels of Von Autoutted with intervals of 5 ms at a free	S27.	9 11			signal output	kHz, 5 kHz, 9 kHz, 10 kHz, 12.3 kHz, 2.5 kHz, 50 kHz and 150 kHz, by program. Note: When the INH input is at "L" level, the output is automatically set to "L" level.
Note: During system resetting or when CKSTP command is executed, output is automatically set to "L" level.	During system resetting or executed, output is automatics	.52	<u>.</u>	47	<u>F</u>	Initialize input	System reset signal input terminal of device. While the $\overline{\text{INT}}$ is at ".H" level, resetting is activated. When at ".H" level, he accordant is started from 0 address. Normally, when voltage of $0V_*$
\$1~Se LCD segment Terminal to output segment signal output to LCD. output It is possible to indicate max. 54 segments by using the matrix COM1 snd COM2. Data is outputted to these terminals by SEG command (COM2 system). For segment (COM1 system) and MARK command (COM2 system). For segment decoding, the decode pattern is made in the ROM area, and it is executed by using the DAL command. Note: During system resetting or when CKSTP command is		M1 and ent r is	\$				the program is stated to the AEV is applied to Violate and the AEV is applied to Violate and Violate a
Ke~K3 Key input 4-bit input port for key matrix input. Mhen KEY command which assigns this port at the operand part is executed, data of these terminals are read into RAM. All the terminals incorporate pull-down resistor. The output ports of To-Te are normally used for key return timing signal output.		rt is	R _{INI}	84	<u>K</u>	Inhibit input	Select signal input port of radio mode It is judged that radio is set in ON mode when input is at "H" level, and radio is set in OF mode when input is at "L" level. when this terminal is set in "L" level. REF output is automatically fixed at "L" level. When the CKSTP command is used in the program, and this CKSTP command is executed while IMH is at "L" level, the clock generator and COU stop the operations, and the memory backup state is set by using
To~T6 Key timing 4-bit (To-T3) or 3-bit (T4-T6) output port. These ports are normally used for key return timing signal output of key matrix.		ot of	\rightarrow \right				low current (1 A or below). In this case, all output terminals (indication output, output port, etc.) are set automatically to "L" level. Note: The CKSTP command is effective when INH is at "L" level. If it is executed when INH is at "H" level, the same operation as
z	2-bit I/O port At this port it is possible to assign in assignment, the content of internal pori is used.	this rol	To A/D converter	49	TEST	Test mode control input	that of NOUP command is executed. Test mode control input terminal The test mode is set when input is at "H" level, and normal operation is executed in "L" level or NC state. This terminal incorporates a pull-
/DC. voltage input This terminal is also used for analog input of incorporated 4 or analog input of incorporated 4 or analog input of incorporated 4 or analog is for reference voltage input, and comparison system in which P3-1 is for reference voltage input, and		ling sive	- 5				down resistor. It is normally at "L" level or in NC state. In test mode, the device acts as an evaluation chip, and can evaluate programs on EP ROM base combining with the externally mounted simulation board.
P3.2 is for analog comparison voltage input. P2.4 - I/O port 2		O L	2.5-	51	* *	Quatz oscillator	Connecting terminal of quatz oscillator 7.2 MHz quatz is connected. When the CKSTP command is executed, oscillation is automatically stopped.
port is used. MITE Muting signal 1-bit outbut port. This port is normally used for muting control signal		gnal	TUO	52	GND	Ground	Ground terminal of device.
output port output. Note: When the INH input is chan "H", the output is automatic." "H", the output is automatic.	output. Note:	2	\$	23	0 0 >	Power-on terminal	Power on terminal of device. In normal operation, voltage of 5V ±10% is applied in backup state (when CKSTP command is executed), a voltage can be reduced to 2V.
STB Strobo pulse Serial interface output By executing the SIO command, the externally mounted PLL LSI or an output By executing the SIO command, the externally mounted PLL LSI or an CK Serial clock optional IC of peripheral part can be controlled. The serial transferring output mode, NCD or NCD, can be selected as programmed.		na ning	\ \ \ \ \				When voltage of 0V-4.5V is applied to this terminal, system resetting is activated in the device, the program starts from 0 address. (Power-on reset in Note: Power-on resetting is executed when INH is in "L" level. Note: Since the content of each port (output port, internal port, etc.), when power is connected, is undefined, it is necessary to
Serial data	· ·		\$	(Supplement)	ut)	T	CMOS input

- m-f

000000 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 Τ2 30 46 47 INT Τ1 29 INH TO 28 48 К3 27 49 TEST 26 K2 key input 50 25 Κ1 \overline{Xt} 51 K0 24 52 GND TC9306F-045 23 Vdd Vdd53 Top View 22 COM2 COM1 mini Fp 60 pin S1 S27 21 S2 S26 20 56 57 S3 S25 19 S24 18 58 S4 S23 17 59 S5 S22 16 60 S6

LCD Segment output

NC

51

Сĸ

STB

011

012

013

MW

01

02

- 03

04

05

06

07

08

Serial

1/o por

FM +

OT 3 08

FUNC4 FM +

44 45 45

SYSTEM SUMMARY (TC9306F-045)

Combined with PLL LIS TC 9172AP, high efficiency digital tuning system with FM/MW 2-band can be made.

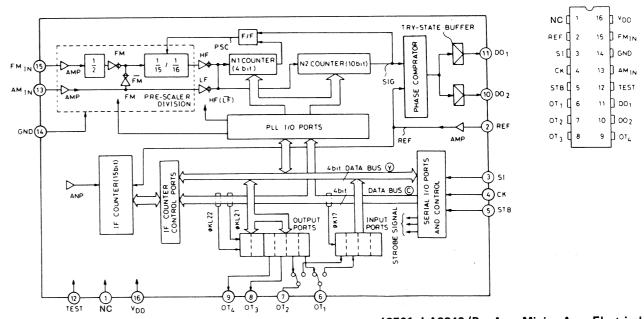
BAND

BAND	CODE A B	FREQUENCY (Hz)	STEP (Hz)	Fref (Hz)	IF (Hz)
	0 0	87.9 ~ 107.9 M	200K		+10.7M
FM	1 0	87.50 ~ 108.00 M	50K	1	+ 10.7M
FM	0 1	76.0 ~ 90.0 M	100K	25K	- 10.7M
Ī	1 1	87.4 ~ 108.1 M	50K		+10.7M
-	0 0	530 ~ 1700 K	10K	10K	4501/
	1 0	531 ~ 1602 K			+450K
MW	0 1	522 ~ 1611 K	1611 K 9K 9I	9K	+459K
	1 1	522 ~ 1629 K	1		+450K
LW	1	144 ~ 290 K	AUTO MANU 9K/1K	1K	+459K
SW1	1 -	13.2 ~ 7.3 M	5K	EV	+450K
SW2	- 1	29.5 ~ 21.75 M	7 2	5K	1 +450K

TC9306F-045

PORT	No.	NAME	FUNCTION	ACTIVE	FIRST SETTING
MUTE	41	MUTE	MUTE OUTPUT	Н	Н
P2-1	40	REM-DATA	REMOTE INPUT	н	_
P2-2	39	VR UP	VR UP OUTPUT	Н	L
P2-3	38	VR DOWN	VR DOWN OUTPUT	н	L
P2-4	37	AUTO/MANUAL	AUTO OUTPUT	Н	L
P3-1	36	TUNED/SD	TUNED & SD INPUT	L	-
P3-2	35	STEREO	STEREO INPUT	L	-

IC401 TC9172AP (HIGH-SPEED PLL WITH PRE-SCALER)

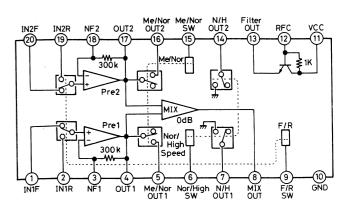


Programmble

counter

11 Phase comparator output

IC501 LA3246 (Pre-Amp Mixing-Amp Electrical Switch)



TC9172AP	,				
PORT	NO.	NAME	FUNCTION	ACTIVE	FIRST SETTI
OT 1	06	FM	FM BAND OUTPUT	Н	н
OT 2	07	AM (MW, LW)	LW, MW OUTPUT	н	L

TC9172P

Top View

D1P 16pin

MW BAND OUTPUT LW BAND OUTPUT

VDD

FMin

GND

AMın

TEST

D01

D02

014

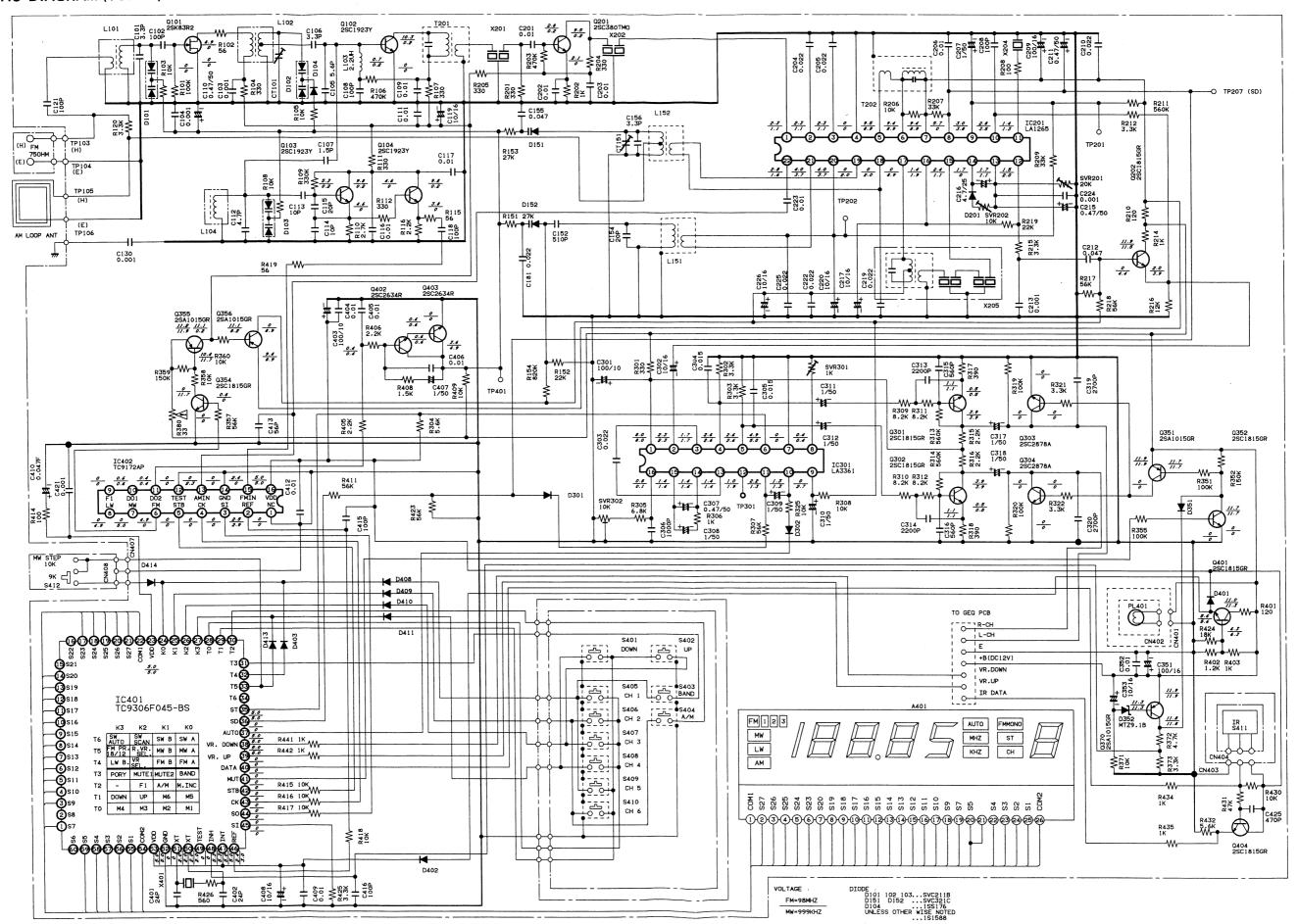
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14

12

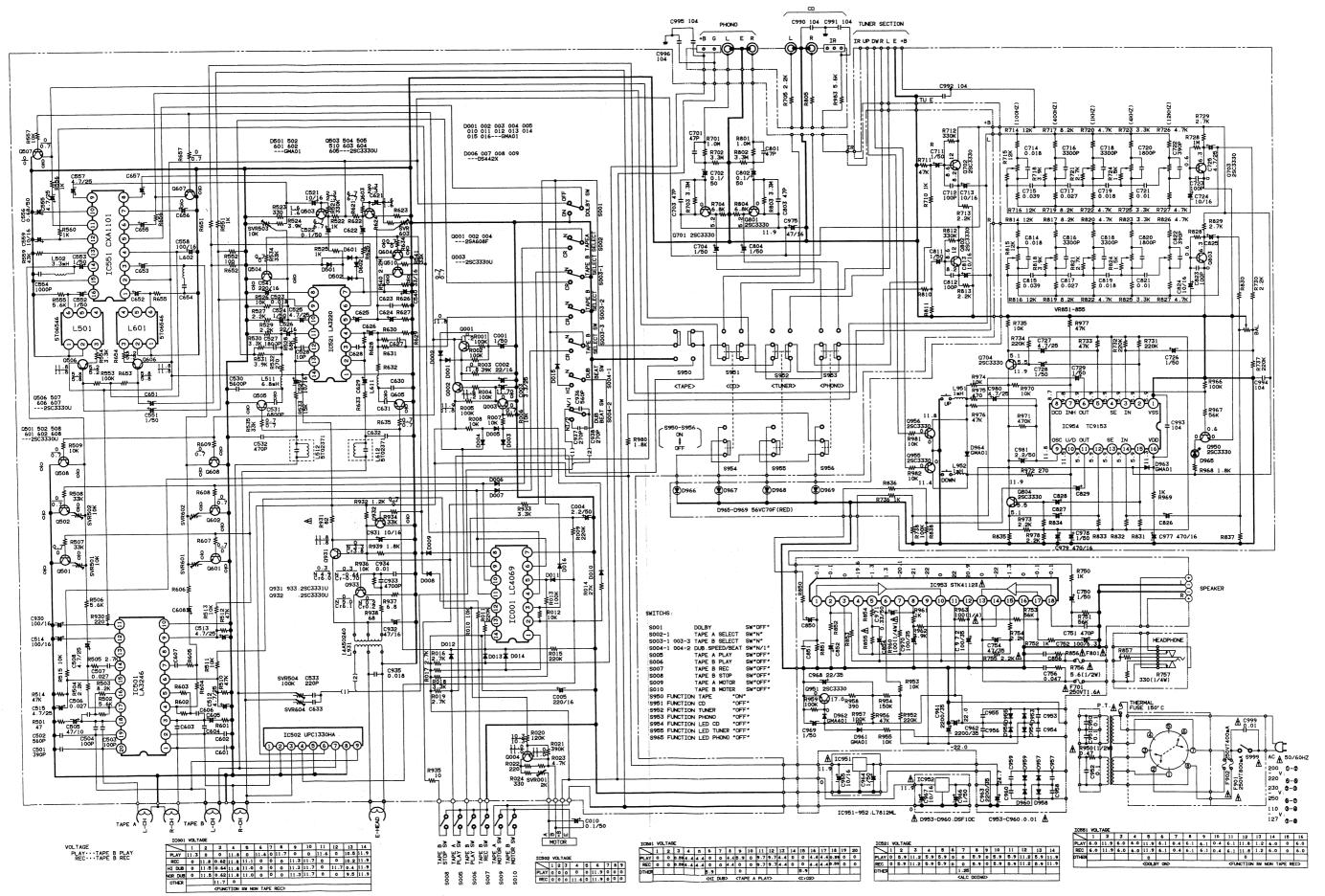
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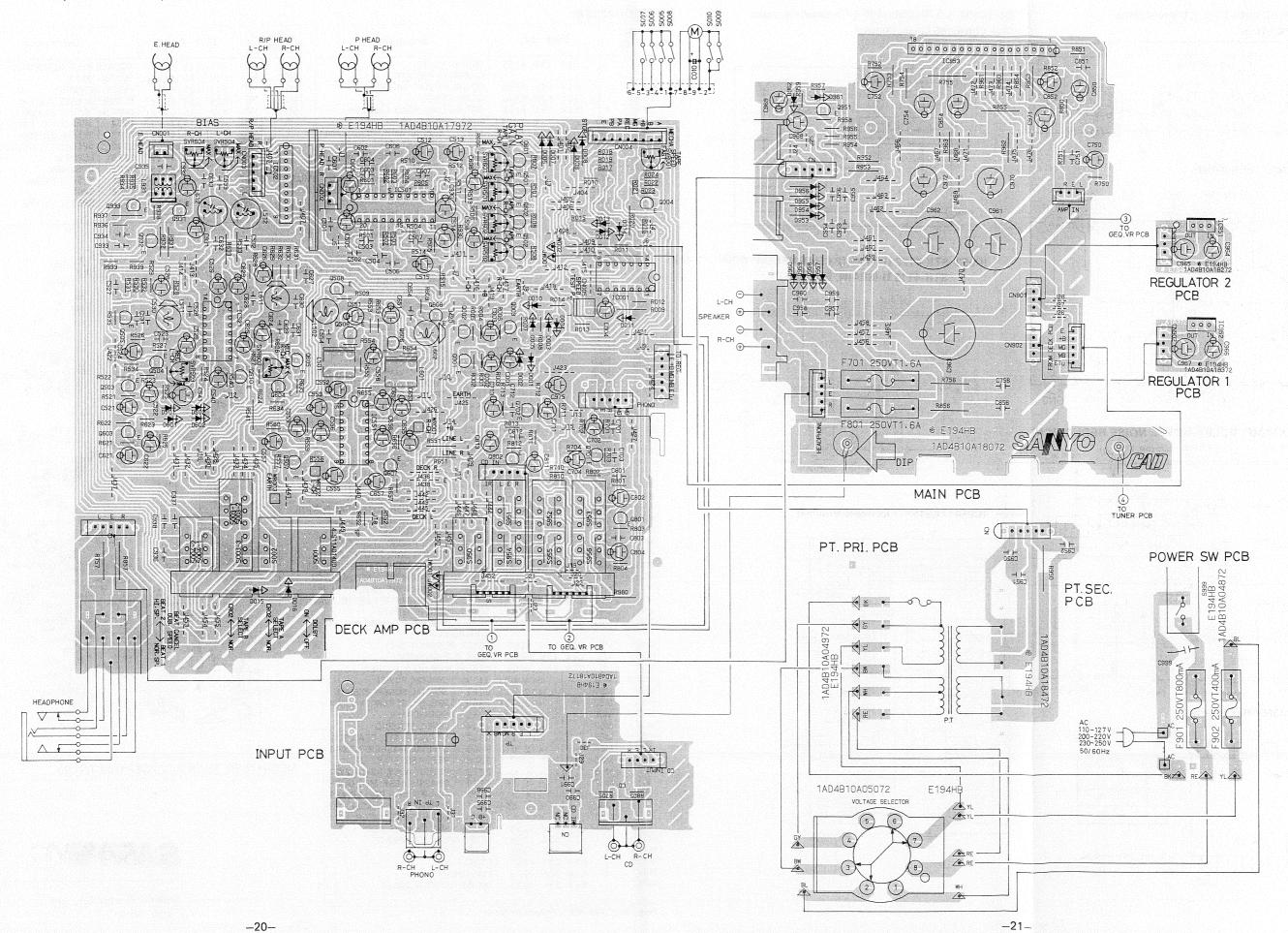
13 —



-16-

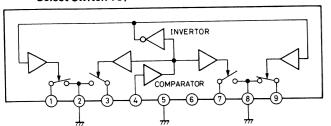
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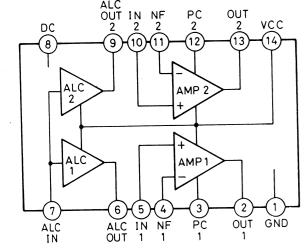


IC BLOCK DIAGRAM (3/3) -

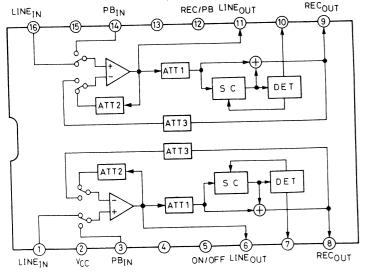
IC502 μPC1330HA (Cassette Deck 2 Channel Head Select Switch IC)



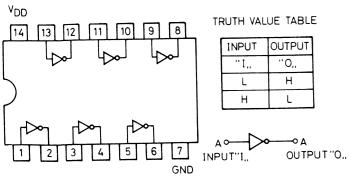
IC521 LA3220 (Dual Pre-Amplifier)



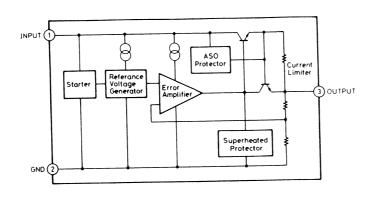
IC551 CXA1101P (DOLBY B-TYPE NOISE REDUCTION)



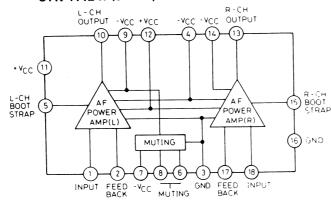
IC001 LC4069 (Hex Inverter)



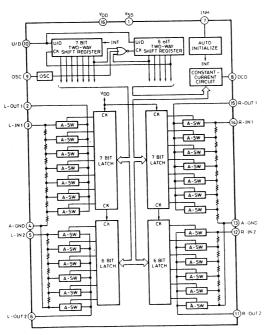
IC951, IC952 LA7812ML (12V 3-Terminal Constant Voltage Regulated Power Supply)



IC953 STK-4122 II (U.K) (2 CHANNEL AF POWER AMP) STK-4112 II (SPAIN, EUROPE)



IC954 TC9153 (Electronic Volume)

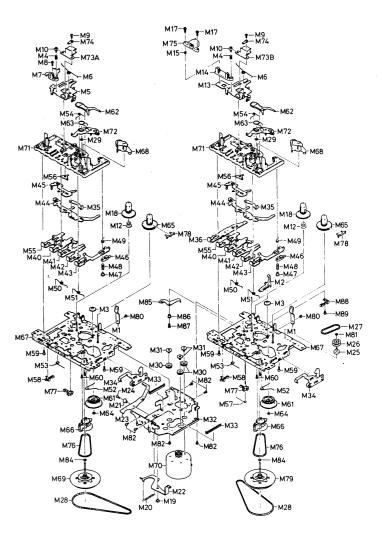


PARTS LIST & EXPLODED VIEW (MECHANISM)-

MECHANISM

Ref. No.	Part No.	Description
M1	614 151 8299	SPRING PLATE,
M2	614 140 1508	CASSETTE PRESURE LEVER, RECORD SAFETY
M3	614 134 9046	GEAR, F.FWD
M4	614 151 7162	SPRING COIL, HEAD AZIMUTH
M5	614 211 6944	SLIDE, HEAD PANEL SPRING WIRE, HEAD PANEL
M6 M7	614 210 3432 614 146 5111	BRACKET, TAPE GUIDE
M8	412 031 7901	SPECIAL SCREW 2X6MM
M9	412 031 6607	SPECIAL SCREW 2X3MM
M10	412 026 1709	SPECIAL SCREW 2X7MM, AZIMUTH SPRING, COMP, BACK TENSION
M12 M13	614 208 0351 614 210 6822	SLIDE, HEAD PANEL
M14	614 196 0470	BRACKET HEAD, ERASE
M15	614 151 5090	SPRING COIL, ERASE HEAD
M17	412 027 4600	SPECIAL SCREW 2X8MM
M18 M19	614 211 3868 412 005 8101	REEL ASSY, SUPPLY SPECIAL SCREW, LEVER (22)
M20	614 151 4758	SPRING COIL, PLAY KICK LEVER
M21	614 129 0683	BOSS, PLAY KICK LEVER
M22	614 139 8679	LEVER, PLAY KICK A
M23	614 140 1676	LEVER, PLAY KICK B SPECIAL SCREW
M24 M25	412 031 7901 614 197 7898	SHAFT, PULLEY
M26	614 197 7720	PULLEY, BELT
M27	614 197 7638	SQUARE BELT, PULLEY
M28	614 133 4127	SQUARE BELT, MAIN SPECIAL WASHER, 1.45X3.8X0.5T
M29 M30	412 026 1808 614 126 6831	CUSHION, MOTOR RUBBER
M31	412 026 1907	SPECIAL SCREW, MOTOR MTG.
M32	614 122 9553	BRACKET MOTOR
M33	614 126 6848	CUSHION, ANTI VIBRATION
M34 M35	614 140 1522 614 140 1539	LEVER, EJECT SLIDE LEVER, EJECT KICK
M36	614 196 0500	LEVER, REC. BUTTON
M40	614 196 0517	LEVER, REW. BUTTON
M41	614 196 0524	LEVER, F.FWD BUTTON
M42	614 196 0531	LEVER, STOP BUTTON LEVER, PAUS BUTTON
M43 M44	614 208 0313 614 201 1737	SLIDE, PUSH BUTTON ACTUATOR
M45	614 201 1744	SLIDE, SWITCH ACTUATOR
M46	614 208 0320	LEVER, PAUSE
M47	614 129 0669	BOSS, PAUSE STOPPER
M48 M49	614 151 7186 614 152 1244	SPRING COIL, PAUSE LEVER SPRING WIRE, PAUSE CONTROL
M50	614 152 1251	SPRING WIRE, BUTTON LEVER
M51	614 152 1268	SPRING WIRE, BUTTON LEVER
M52	614 152 1275	SPRING WIRE, EJECT ACTUATOR
M53 M54	614 152 1282 614 152 1299	SPRING WIRE, P.S LEVER SPRING WIRE, MECHANISM
10134	014 132 1299	CONTROL
M55	614 196 0555	LEVER, PLAY BUTTON
M56	614 129 0676	BOSS, R/P STOPPER
M57 M58	614 152 1305	SPRING WIRE, REC. BUTTON SWITCH, POWER
M59	614 024 3437 412 026 2201	SPECIAL SCREW 2X5MM
M60	412 026 2300	SPECIAL SCREW 2X4.5MM
M61	614 134 9053	GEAR, CAM
M62	614 140 1614	LEVER, SENSING SPRING PLATE, GEAR PLATE
M63 M64	614 151 8312 412 013 5000	SPECIAL WASHER, 1.2X3.8X0.3T
M65	614 211 3875	REEL ASSY, TAKE UP
M66	614 069 2273	PULLEY ASSY, REW/F.FWD CLUTCH
M67	614 067 2770	CHASSIS ASSY, MECHANISM
M68 M69	614 210 3302 614 068 1871	LEVER PINCH ROLLER ASSY FLYWHEEL DISK ASSY, TAPE A
M69 M70	614 211 3752	COMMUTATE MOTOR ASSY
M71	614 067 3258	SUB CHASSIS ASSY, BASE
M72	614 070 0916	LEVER ASSY, GEAR PLATE
M73A M73B	614 208 4069	HEAD, PLAY HEAD, R/P
M73B M74	614 208 4052 614 208 0276	LUG, GND
M75	614 021 8831	MAGNETIC HEAD, ERASE

M76 614 195 5087 SQUARE BELT, REW/F.FWD M77 614 195 4424 SWITCH, PLAY M78 614 195 5094 LEVER, SENSOR M79 614 204 8672 FLYWHEEL ASSY, TAPE B M80 412 026 1402 SPECIAL SCREW 2X3MM M81 412 013 4904 MSHER 1.2X3X0.25T M82 412 026 2003 SPECIAL SCREW 2X4MM M84 412 013 8902 SPECIAL WASHER 2X3.5X0.3T M85 614 197 0219 LEVER, SW (M88) M86 614 197 0202 BOSS, LEVER (M85)	Ref. No.	Part No.	Description
M87	M77 M78 M79 M80 M81 M82 M84 M85 M86 M87	614 195 4424 614 195 5094 614 204 8672 412 026 1402 412 013 4904 412 026 2003 412 013 8902 614 197 0219 614 197 0202 412 026 2102 614 196 9756	SWITCH, PLAY LEVER, SENSOR FLYWHEEL ASSY, TAPE B SPECIAL SCREW 2X3MM SPECIAL WASHER 1.2X3X0.25T SPECIAL SCREW 2X4MM SPECIAL WASHER 2X3.5X0.3T LEVER, SW (M88) BOSS, LEVER (M85) SPECIAL SCREW 2X3MM SWITCH, REC.



MECHANISM TM-DCX49TN/SP (149-474-16)



SANYO Electric Co., Ltd. Osaka, Japan